

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S131	3	S130 not S129	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2006/10/20 19:11
S130	8	S128 not S127	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2006/10/20 19:11
S129	5	S128 not S127	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/20 19:07
S128	14	(US-20010023209-\$).did. or (US-6149532-\$ or US-6293802-\$ or US-5529307-\$ or US-5674130-\$ or US-5375832-\$ or US-5527036-\$ or US-5269519-\$ or US-6375580-\$ or US-5282629-\$ or US-5603664-\$).did. or (JP-04241885-\$ or JP-06022319-\$ or JP-06311474-\$).did.	US-PGPUB; USPAT; JPO	OR	ON	2006/10/20 19:06
S127	15	("5209479" "5246232" "5375832" "54 01026" "5524888" "5529307" "558005 3" "5603664" "5611535" "5674130" " 5807172" "6149532" "6179720" "6375 580" "6456232").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/20 19:06
S126	9	("2696985"   "4181309"   "5052688"   "5282629"   "5356148"   "5603664"   "5662526"   "5916033").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/20 19:06
S125	22	473/134-136.ccls. and ((radio near detect\$4) or IR or infrared)	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/20 17:37
S124	1	473/134-136.ccls. and radar	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/20 17:36
S123	15	("5209479" "5246232" "5375832" "54 01026" "5524888" "5529307" "558005 3" "5603664" "5611535" "5674130" " 5807172" "6149532" "6179720" "6375 580" "6456232").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/20 17:35
S122	1	S121 and (detect\$5).ti.	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/20 17:25
S121	47	473/134-136.ccls. and (detect\$5)	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/20 17:24
S120	8	S118 and signal	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/20 17:23

## EAST Search History

S119	7	S118 and (condition\$5 determination\$3)	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/20 17:23
S116	66	473/134-136.ccls. and (condition\$5 or determination\$5)	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/20 17:23
S118	27	("1637537"   "2198968"   "3378263"   "3448985"   "3549152"   "4355811"   "4659081"   "4676397"   "4832345"   "5016886"   "5131661"   "5133557"   "5145176").PN. OR ("5356148"). URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/20 17:22
S117	51	S116 and (auto\$3 automatic\$3)	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/20 17:05
S115	1	473/134-136.ccls. and analyz\$6	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/20 17:04
S114	1	("6375580").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/10/20 17:03
S113	1	("4,184,156").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/10/20 16:58
S112	0	golf and doppler and sound	EPO; JPO	OR	ON	2006/10/20 15:56
S111	11	golf and (movement motion) and sound\$4 and (detect\$5 determin\$5)	EPO; JPO	OR	ON	2006/10/20 15:46
S110	23	golf and (movement motion) and sound\$4	EPO; JPO	OR	ON	2006/10/20 15:46
S109	23	golf and (movement motion) and sound\$5	EPO; JPO	OR	ON	2006/10/20 15:46
S108	1	golf and (motion movement) and sound\$5	FPRS; EPO; JPO	AND	ON	2006/10/20 15:45
S107	2	golf and (detect\$5 with (motion movement))	FPRS; EPO; JPO	AND	ON	2006/10/20 15:45
S66	23	golf and (movement motion) and sound	EPO; JPO	OR	ON	2006/10/20 15:45
S106	305	golf and sound	FPRS; EPO; JPO	AND	ON	2006/10/20 15:44
S105	1	golf and radio and sound	FPRS; EPO; JPO	AND	ON	2006/10/20 15:44
S104	21	golf and (radio with detect\$5)	FPRS; EPO; JPO	AND	ON	2006/10/20 15:44
S103	0	golf and (radio adj detect\$5)	FPRS; EPO; JPO	AND	ON	2006/10/20 15:43

## EAST Search History

S102	0	golf and (radio adj detect\$5) and sound	FPRS; EPO; JPO	AND	ON	2006/10/20 15:43
S101	7	golf and radar	FPRS; EPO; JPO	AND	ON	2006/10/20 15:43
S100	54	golf and radar	FPRS; EPO; JPO; DERWENT	AND	ON	2006/10/20 15:42
S99	7	golf and radar	EPO; JPO	AND	ON	2006/10/20 15:42
S98	0	golf radar microphone	EPO; JPO	AND	ON	2006/10/20 15:42
S97	0	golf\$5 radar microphone	EPO; JPO	AND	ON	2006/10/20 15:42
S96	0	golf radar microphone	EPO; JPO	AND	ON	2006/10/20 15:42
S95	49727	golf radar microphone	EPO; JPO	OR	ON	2006/10/20 15:41
S94	0	golf radar microphone	EPO; JPO	AND	ON	2006/10/20 15:41
S93	0	golf radar microphon\$3	EPO; JPO	AND	ON	2006/10/20 15:41
S92	0	golf radar sound	EPO; JPO	AND	ON	2006/10/20 15:41
S63	0	golf and radar and sound	EPO; JPO	OR	ON	2006/10/20 15:41
S91	8	S89 and radar	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2006/10/20 15:25
S90	8	S89 and radar	USPAT	OR	ON	2006/10/20 15:25
S89	16	("5246232").URPN.	USPAT	OR	ON	2006/10/20 15:24
S88	2	(golf and radar and (sound or microphon\$3)).ab.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO	OR	ON	2006/10/20 15:24
S87	201	(golf and radar and (sound or microphon\$3))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO	OR	ON	2006/10/20 15:24
S86	201	golf and radar and (sound or microphon\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO	OR	ON	2006/10/20 15:24
S85	1	"473"/\$.ccls. and (golf and radar).ti.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO	OR	ON	2006/10/20 15:23

## EAST Search History

S84	49	"473"/\$.ccls. and golf and radar and (sound\$3 microphon\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO	OR	ON	2006/10/20 15:22
S81	13	(golf with radar with (sound microphon\$3))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO	OR	ON	2006/10/20 15:22
S83	201	(golf and radar and (sound microphon\$3))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO	OR	ON	2006/10/20 15:12
S82	2	(golf and radar and (sound microphon\$3)).ab.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO	OR	ON	2006/10/20 15:12
S80	7	golf and radar	EPO; JPO	OR	ON	2006/10/20 15:11
S79	0	golf and radar and sound	EPO; JPO	OR	ON	2006/10/20 14:58
S78	0	gofl and radar and sound	EPO; JPO	OR	ON	2006/10/20 14:58
S65	0	gofl and (movement motion) and sound	EPO; JPO	OR	ON	2006/10/20 14:58
S77	0	S75 AND DISPENS\$3	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2006/10/20 14:15
S76	0	S75 AND FEED\$3	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2006/10/20 14:15
S75	23	S72	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2006/10/20 14:15
S74	0	S72 or S73	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/20 14:15
S73	0	S72	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/20 14:14
S72	23	golf and (movement motion) and sound	EPO; JPO	OR	ON	2006/10/20 14:14
S71	0	(golf same analyz\$3 same sound same camera).ab.	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/20 14:13

## EAST Search History

S70	2	(golf same analyz\$3 same sound same camera).ab.	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2006/10/20 14:13
S69	2	(NISHITANI with YOSHIHISA).in. and golf	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2006/10/20 14:12
S68	1	(MURAKAMI with MASASHI).in. and golf	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2006/10/20 14:11
S67	33	(motion adj analyzer).ti.	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2006/10/20 14:11
S64	14026	golf	EPO; JPO	OR	ON	2006/10/20 11:42
S62	0	golf\$3 and (compar\$5 with (radar\$3 movement\$3 motion\$3) with (sound\$3 accoustic\$3 nois\$3 sonic\$3))	EPO; JPO	OR	ON	2006/10/20 11:42
S61	2	S60 and (sound\$5 accoustic\$5 microphon\$3)	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/20 11:31
S60	17	("4817955"   "4981299"   "5282628"   "5326107"   "5342054"   "5529307"   "5647805"   "5672124"   "5674130"   "5718638"   "5860870"   "5895325"   "5988861"   "6174243"   "6179719"). PN. OR ("6375580").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/20 11:31
S59	17	S58 and (sound\$5 microphon\$5 accoustic\$5 sonic\$5 nois\$5)	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/20 11:16
S58	193	473/134-136.ccls.	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/20 11:15
S57	97	S54 not S56	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/20 11:15
S56	2	S53 and (sound\$5 microphon\$5 accoustic\$5 sonic\$5 nois\$5).ti.	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/20 11:15
S55	0	S53 and ((sound\$5 microphon\$5 accoustic\$5 sonic\$5 nois\$5) with (movement\$5 motion\$5 swing\$5)).ti.	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/20 10:57
S54	99	S53 and ((sound\$5 microphon\$5 accoustic\$5 sonic\$5 nois\$5) same (movement\$5 motion\$5 swing\$5))	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/20 10:57

## EAST Search History

S53	580	(473/134-136,151,152,155,199,202,221).CCLS.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/10/20 10:56
S42	4	((("20040127304") or ("4451043") or ("6821211") or ("6500075")).PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/10/20 10:51
S52	9	"473"/\$.ccls. and ((signal with (movement motion)) same (signal with (nois\$3 sound\$3 accoustic\$3 sonic\$3 microphon\$3)) same (compar\$5 differenc\$5))	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/20 10:17
S51	9	"473"/\$.ccls. and ((signal with (movement motion)) same (signal with (nois\$3 sound\$3 accoustic\$3 sonic\$3 microphon\$3)) same (compar\$5))	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/20 10:17
S50	155	"473"/\$.ccls. and (signal with (movement motion)) and (signal with (nois\$3 sound\$3 accoustic\$3 sonic\$3 microphon\$3))	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/20 10:17
S49	10	S46 and (sound\$3 nois\$3 microphon\$3 accoustic\$5 sonic\$5)	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/20 10:16
S48	6	S47 not (S45 or S43)	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/20 10:14
S47	56	((golf\$3 with swing\$3 with (motion movement)) same display\$3) and (sound\$3 microphon\$3 acoustic\$5 sonic\$3)	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/20 10:08
S44	50	((golf\$3 with swing\$3 with (motion movement)) same display\$3) and (sound\$3 microphon\$3)	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/20 10:07
S46	20	("3531116"   "4264072"   "4695953"   "4767121"   "4817950"   "4858934"   "4976435").PN. OR ("5269519").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/20 10:06
S45	41	S44 not S43	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/20 10:05
S43	15	((golf\$3 with swing\$3 with analyz\$5) same display\$3) and (sound\$3 microphon\$3)	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/20 10:04
S41	15	("5209479" "5246232" "5375832" "5401026" "5524888" "5529307" "5580053" "5603664" "5611535" "5674130" "5807172" "6149532" "6179720" "6375580" "6456232").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/20 09:54

## EAST Search History

S40	9	"473"/\$.ccls. and golf\$3 and (ball\$3 with detect\$3).ti.	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/20 09:01
S39	95	(ball\$3 with detect\$3).ti.	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/20 09:01
S38	24	golf\$3 and (compar\$5 with (hitt\$5 strik\$3) with (motion\$3 movement\$3))	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/20 09:01
S37	18	("3113782" "3137504" "3156211" "3303863" "3498616" "3528664" "3578801" "4090711" "5133551" "5634856" "6461163" "6800035").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/20 08:06
S36	31	S35 not S34	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/20 08:06
S35	31	(golf\$3 or "473"/\$.ccls.) and (both with (movement\$3 motion\$3) with (sound\$3 nois\$3))	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/20 08:01
S34	10	(golf\$3 or "473"/\$.ccls.) and (compar\$5 with (movement\$3 motion\$3) with (sound\$3 nois\$3))	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/20 08:01
S33	4	(golf\$3 or "473"/\$.ccls.) and (compar\$3 with (movement\$3 motion\$3) with (sound\$3 nois\$3))	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/20 07:59
S32	10	"473"/\$.ccls. and ((detect\$3 sens\$5) with both with (nois\$3 sound\$3) with (movement\$3 swing\$3 path\$3))	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/19 21:06
S31	34255	"473"/\$.ccls. ((detect\$3 sens\$5) with both with (nois\$3 sound\$3) with (movement\$3 swing\$3 path\$3))	US-PGPUB; USPAT	OR	ON	2006/10/19 21:06
S29	7	(US-20010023209-\$).did. or (US-5529307-\$ or US-5674130-\$ or US-5375832-\$ or US-6149532-\$ or US-5527036-\$ or US-6293802-\$).did.	US-PGPUB; USPAT	OR	ON	2006/10/19 21:05
S30	7	S29 and both	US-PGPUB; USPAT	OR	ON	2006/10/19 21:04
S28	15	"473"/\$.ccls. and ((detect\$3 with (sound\$3 nois\$3)) same (detect\$3 with (movement\$3 swing\$3)) same (determin\$3 compar\$3))	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/19 20:57
S26	47	"473"/\$.ccls. and ((detect\$3 with (sound\$3 nois\$3)) same (detect\$3 with (movement\$3 swing\$3)))	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/19 20:57
S27	37	S26 and (determin\$3 compar\$3)	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/19 20:56

## EAST Search History

S25	9	S21 and ((sound\$3 microphon\$3))	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/19 20:55
S24	1	S21 and ((sound\$3 microphon\$3) same (radar\$3 movement\$3))	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/19 20:54
S23	1	S21 and ((sound\$3 microphon\$3) with (radar\$3 movement\$3))	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/19 20:54
S22	0	S21 and ((sound\$3 microphon\$3) with (radar\$3 movement\$3) with (compar\$3))	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/19 20:54
S21	374	473/132-137.ccls.	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/19 20:53
S20	17	"473"/\$.ccls. and golf\$3 and (ball with detection) and ((microphon\$3 sound\$3) same (radar infrared movement))	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/19 20:52
S19	16	"473"/\$.ccls. and ((sound\$3 microphon\$3) with (radar detect\$5) with movement)	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/19 20:30
S18	3	("5471383" "6233007" "20020085213" ).PN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/19 20:29
S17	2	golf\$3 and (detect\$3 with (sound microphon\$3) with (hit\$3 strik\$3)) and ((radar\$3 infrared\$3) with movement\$3)	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/19 20:27
S10	23	golf\$3 and (detect\$3 with (sound microphon\$3) with (hit\$3 strik\$3)) and (radar\$3 infrared\$3 movement\$3)	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/19 20:23
S16	8	S14 or S15	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/19 20:13
S15	7	"473"/\$.ccls. and ((detect\$3 with (sound microphon\$3) with (hit\$3 strik\$3)) same (radar\$3 infrared\$3 movement\$3))	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/19 20:13
S14	7	golf\$3 and ((detect\$3 with (sound microphon\$3) with (hit\$3 strik\$3)) same (radar\$3 infrared\$3 movement\$3))	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/19 20:13
S13	1	("4560166").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/10/19 20:11



## EAST Search History

S12	7	S11 not S10	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/19 20:07
S11	27	"473"/\$.ccls. and (detect\$3 with (sound microphon\$3) with (hit\$3 strik\$3)) and (radar\$3 infrared\$3 movement\$3)	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/19 20:07
S9	5	S6 and (sound\$3 microphon\$3)	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/19 20:06
S6	15	("5209479" "5246232" "5375832" "5401026" "5524888" "5529307" "5580053" "5603664" "5611535" "5674130" "5807172" "6149532" "6179720" "6375580" "6456232").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/19 20:05
S8	15	("3992011"   "4180726"   "4560167"   "5338036"   "5375832"   "5401026"   "5437457"   "5479008"   "5527036"   "5527041"   "5553857"   "5558585"   "5599239"   "5694340").PN. OR ("6149532").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/19 19:55
S7	30	golf\$3 and (detect\$3 with movement\$3 with sound\$3)	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/19 19:52
S5	68	473/134.ccls.	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/19 19:40
S4	44	473/134.ccls.	USPAT	OR	ON	2006/10/19 19:36
S3	0	("2004/0192455").URPN.	USPAT	OR	ON	2006/10/19 19:36
S2	3	S1 and ((ball\$3 tee) with feeder\$3)	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/19 19:36
S1	1303	golf\$3 and ((sound\$3 nois\$3) with (club\$3 strik\$3))	US-PGPUB; USPAT; USOCR	OR	ON	2006/10/19 19:36